

Title (en)  
PHENANTHROLINE COMPOUND, ELECTRON TRANSPORT MATERIAL OBTAINED FROM SAID COMPOUND, AND ORGANIC THIN-FILM PHOTOVOLTAIC CELL COMPRISING SAID COMPOUND

Title (de)  
PHENANTHROLINVERBINDUNG, AUS DIESER VERBINDUNG GEWONNENES ELEKTRONENTRANSPORTMATERIAL UND ORGANISCHE DÜNNSCHICHTPHOTOVOLTAIKZELLE MIT DIESER VERBINDUNG

Title (fr)  
PHÉNANTHROLINE, MATÉRIAU TRANSPORTEUR D'ÉLECTRONS OBTENU À PARTIR DUDIT COMPOSÉ ET CELLULE PHOTOVOLTAÏQUE À COUCHE MINCE ORGANIQUE COMPRENANT LEDIT COMPOSÉ

Publication  
**EP 2599780 A4 20140122 (EN)**

Application  
**EP 11812068 A 20110727**

Priority  
• JP 2010168789 A 20100728  
• JP 2011004246 W 20110727

Abstract (en)  
[origin: EP2599780A1] A compound represented by the following formula (1), wherein L is a single bond or a divalent group, and is bonded at any one of the 6 th , 8 th and the 9 th positions indicated by \* of 1,10-phenanthroline; Rg is a substituted or unsubstituted benzene ring or a substituted or unsubstituted naphthalene ring; and X is an oxygen atom or N-R 4 .

IPC 8 full level  
**C07D 471/04** (2006.01); **H01L 51/42** (2006.01)

CPC (source: EP KR US)  
**B82Y 10/00** (2013.01 - EP US); **C07D 471/04** (2013.01 - EP KR US); **C09B 57/00** (2013.01 - EP US); **H01G 9/2009** (2013.01 - US); **H01G 9/2072** (2013.01 - US); **H10K 85/6572** (2023.02 - EP US); **H10K 30/20** (2023.02 - EP KR US); **H10K 30/353** (2023.02 - US); **H10K 30/40** (2023.02 - EP KR); **H10K 30/50** (2023.02 - EP KR); **H10K 85/211** (2023.02 - EP US); **H10K 85/624** (2023.02 - EP US); **H10K 85/633** (2023.02 - EP US); **H10K 2102/103** (2023.02 - EP US); **Y02E 10/542** (2013.01 - EP); **Y02E 10/549** (2013.01 - EP US)

Citation (search report)  
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• [X] MARTELLI A ET AL: "Design of site specific DNA damaging agents for generation of multiply damaged sites", TETRAHEDRON, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 58, no. 21, 20 May 2002 (2002-05-20), pages 4291 - 4298, XP004357403, ISSN: 0040-4020, DOI: 10.1016/S0040-4020(02)00345-9  
• See also references of WO 2012014466A1

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JP2021082719A

Designated contracting state (EPC)  
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